

WHAT IS CLAIMED IS:

- 1 1. A submersible device for attracting and stimulating aquatic animals, said device
2 comprising:
 - 3 a watertight housing;
 - 4 a first transducer element disposed within said housing; and
 - 5 a diaphragm operably connected to said first transducer element,
6 wherein said device is operable as either a speaker or a hydrophone in response to
7 control signals received from a programmable device above water; and
8 wherein said device emits one or more prerecorded acoustical signals in a
9 specified sequence and at a specified volume in response to control signals
10 received from said programmable device above water; and
11 wherein said one or more prerecorded acoustical signals comprise sounds of prey
12 being attacked and eaten underwater.
- 1 2. The submersible transducer device as claimed in claim 1, further comprising:
 - 2 a second transducer element disposed within said housing; and
 - 3 a second diaphragm operably connected to said second transducer element,
4 wherein said second transducer element is positioned opposite said first
5 transducer element.
- 1 3. The submersible transducer device as claimed in claim 1, further comprising a
2 flotation device coupled to said housing.

1 4. A system for attracting and stimulating aquatic animals, said system comprising:
2 a submersible device comprising a transducer element disposed within a
3 watertight housing; and
4 a programmable control unit operably connected to said submersible device, said
5 programmable control unit comprising:
6 a processor;
7 a memory device operably connected to said processor, for storing a
8 plurality of digital sound recordings; and
9 an input device operably connected to said processor, for selecting one or
10 more of said plurality of digital sound recordings to be played via
11 said submersible device according to a pre-selected program,
12 wherein said submersible device is responsive to control signals received from
13 said programmable control unit.

1 5. The system as claimed in claim 4, wherein said control signals comprise signals
2 for controlling volume of playback.

1 6. The system as claimed in claim 4, wherein said control signals comprise signals
2 for sweeping volume of playback within a selected range of volume levels.

1 7. The system as claimed in claim 6, wherein said control signals further comprise a
2 time interval between changes in said volume levels.

1 8. The system as claimed in claim 4, wherein said control signals comprise a delay
2 signal.

1 9. The system as claimed in claim 4, wherein playback of said one or more of said
2 plurality of digital sound recordings is intermittent.

1 10. The system as claimed in claim 4, wherein said plurality of digital sound
2 recordings comprise an audio recording of fish in distress.

1 11. The system as claimed in claim 4, wherein said plurality of digital sound
2 recordings comprise an audio recording of prey being attacked and eaten underwater.

1 12. The system as claimed in claim 4, wherein said transducer element is positioned
2 opposite from a second transducer element within said housing.

1 13. A method for attracting and stimulating aquatic animals, said method comprising
2 the steps of:

3 selecting one or more digital sound recordings from a memory device which
4 stores a plurality of digital sound recordings;
5 selecting a delay period;
6 repeatedly transmitting a signal to an underwater transducer device,
7 wherein said signal corresponds to the one or more digital sound recordings; and
8 wherein successive transmissions of the signal are separated by the delay period;
9 and
10 wherein said plurality of digital sound recordings include recordings of aquatic
11 animals feeding.

1 14. The method as claimed in claim 13, further comprising the step of selecting a
2 sequential arrangement of digital sound recordings from the plurality of digital sound recordings.

1 15. The method as claimed in claim 14, further comprising the step of selecting an
2 individual volume level for each of said digital sound recordings in said sequential arrangement.

1 16. The method as claimed in claim 13, further comprising the step of gradually
2 increasing the volume level of the signal up to a selected maximum volume level.

1 17. The method as claimed in claim 16, further comprising the step of selecting an
2 interval of time between increases in the volume level.

1 18. The method as claimed in claim 13, further comprising the step of receiving
2 acoustical signals from said underwater transducer device.

1 19. The method as claimed in claim 18, further comprising the step of comparing one
2 or more characteristics of said acoustical signals to one or more characteristics of said plurality
3 of digital sound recordings.

1 20. The method as claimed in claim 13, further comprising the step of recording
2 acoustical signals received from said underwater transducer device.